



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,260	12/20/2000	Peter Phaal	21906-702	8339

7590 09/20/2004

David G. Beck  
Bingham McCutchen LLP  
3 Embarcadero Center  
Suite 1800  
San Francisco, CA 94111

EXAMINER
----------

ODLAND, DAVID E

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/745,260

Applicant(s)

PHAAL, PETER

Examiner

David Odland

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 10-22, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Pendleton et al. (USPN 5,982,753), hereafter referred to as Pendleton.

Referring to claims 1 and 14, Pendleton discloses a method to monitor a network switch by a monitor device (a method of monitoring a switch using test equipment (see figure 1-3 and column 5)), said network switch having a plurality of regular ports and a mirror port (see ports 11, 16, 20 and 22 in figures 1 and 2), said mirror port being able to mirror network traffic for at least one of said regular ports (the test instrument can passively receive traffic that it transported between network nodes (see figures 1-3 and column 5)), said network switch coupling to said monitor device through said mirror port (the switch and the test equipment are coupled to each other (see figures 1 and 2)), said network traffic comprising data packets forwarded between two of the plurality of regular ports (the traffic sent between nodes of the LAN are IP packets (see columns 1 and 5)), comprising (1) selecting at least one of said regular ports (a port is selected to connect the test equipment to (see item 200 in figure 6)) (2) mirroring a data packet of the selected port to said mirror port (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)) and (3) forwarding said data packet to a monitor device (packets are forwarded to the test equipment (see figures 1-3 and

Art Unit: 2662

columns 5 and 7)) (4) extracting the network address information of said data packet in said monitor device (the test equipment uses passive monitoring to perform a discovery process which allows the test equipment to extract MAC and/or IP address from the passively monitored packets (see figure 6 and columns 5 and 7)) (5) determining port information of said network address information (the test equipment uses MIBs to build a port table (see item 47 in figure 5)) and (6) performing network analysis of said network switch (the test equipment analyzes reports regarding the ports and related traffic through the switch (see column 8)).

Referring to claims 2 and 15, Pendleton discloses that said port information refers to physical information of said network address information in said network switch (the port number corresponds to the physical port that the network node is attached to (see figures 2 and 3)).

Referring to claim 3, Pendleton discloses that said determining step comprising: interrogating said switch to obtain said port information using said network address information (the switches MIBs can also be requested in order to build the port table (see column 7 and figure 5)).

Referring to claim 4, Pendleton discloses that said interrogating step comprising sending a first request to said network switch requesting a port index corresponding to said network address information (the test equipment queries the switch using SNMP in order to get MIBs that show port information (see columns 6 and 7)) and sending a second request to said network switch requesting said port information corresponding to said port index (various MIBs can be selected which show the port information (see figure 5)).

Art Unit: 2662

Referring to claim 5, Pendleton discloses that said first request and said second request are SNMP requests (the test equipment requests the MIBs from the switch uses SNMP queries (see column 6)).

Referring to claim 6, Pendleton discloses that at least two of steps 1 to 6 performed independently and concurrently (the test equipment is continuously receiving packets (step (3)) and extracting network addresses (step (4)) during the passive segment discovery process (see figure 6)).

Referring to claims 10 and 26, Pendleton discloses maintaining at least one lookup table correlating said network address information with said port information (a port table is maintained (see item 47 in figure 5)).

Referring to claims 11 and 12, Pendleton discloses that said network address information comprises source address and the destination address of said data packet (the passive discovery process includes the test equipment receiving IP packets that have been transmitted using the TCP/IP protocol and it is part of this standard to have the source and destination addresses of the packet included in each packet to allow for proper routing, thus the packets received by the test equipment have the source and destination addresses of where that packet came from and where they are going to (see columns 5-7)).

Referring to claims 13 and 27, Pendleton discloses that said network switch is a routing switch (the switch routs packets over a switches network (see figures 1-3)).

Referring to claim 16, Pendleton discloses that said network switch having a plurality of regular ports and a mirror port (see ports 11,16,20 and 22 in figures 1 and 2), said mirror port being able to mirror network traffic for at least one of said regular ports (the test instrument can

Art Unit: 2662

passively receive traffic that it transported between network nodes (see figures 1-3 and column 5)), said network switch coupling to said monitor device through said mirror port (the switch and the test equipment are coupled to each other (see figures 1 and 2)).

Referring to claims 17 and 18, Pendleton discloses that said network address information comprises source address and the destination address of said data packet (the passive discovery process includes the test equipment receiving IP packets that have been transmitted using the TCP/IP protocol and it is part of this standard to have the source and destination addresses of the packet included in each packet to allow for proper routing, thus the packets received by the test equipment have the source and destination addresses of where that packet came from and where they are going to (see columns 5-7)).

Referring to claim 19, Pendleton discloses that said network switch comprising a plurality of regular ports (the switch has a plurality of ports (see figures 1-3)), wherein said data packets are forwarded to said monitor device by passively tapping at least one of said regular ports (the test equipment passively taps into the switch (see figures 1-3 and columns 5 and 7)).

Referring to claim 20, Pendleton discloses that said determining step comprising: interrogating said switch to obtain said port information using said network address information (the switches MIBs can also be requested in order to build the port table (see column 7 and figure 5)).

Referring to claim 21, Pendleton discloses that said interrogating step comprising sending a first request to said network switch requesting a port index corresponding to said network address information (the test equipment queries the switch using SNMP in order to get MIBs that show port information (see columns 6 and &)) and sending a second request to said network

Art Unit: 2662

switch requesting said port information corresponding to said port index (various MIBs can be selected which show the port information (see figure 5)).

Referring to claim 22, Pendleton discloses that said first request and said second request are SNMP requests (the test equipment requests the MIBs from the switch uses SNMP queries (see column 6)).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-9 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pendleton in view of Niestegge (USPN 4,922,488), hereafter referred to as Niestegge.

Referring to claims 7-9 and 23-25, Pendleton does not disclose placing packets in a FIFO and releasing them from the FIFO after the SNMP response or after a predetermined time period. However, Niestegge discloses a system wherein packets are stored in a FIFO and release after a particular time (see column 3 lines 20-60)). It would have been obvious to one skilled in the art at the time of the invention to implement this feature into the Pendleton system because using the buffer would allow the system to wait for a response to the SNMP query made by the test equipment and furthermore FIFOs also provide an organized way of holding data so it is not lost, thereby making the Pendleton system more reliable.

Art Unit: 2662

*Conclusion*

5. The following prior art, which is made of record and not relied upon, is considered pertinent to applicant's disclosure:

- a. U.S. Patent Number 6,108,782 to Fletcher et al.
- b. U.S. Patent Number 6,356,532 to Richardson et al.
- c. U.S. Patent Number 6,724,729 to Sikdar.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland whose telephone number is (571) 272-3096. The examiner can normally be reached on Monday - Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

deo

September 16, 2004



**JOHN PEZZLO  
PRIMARY EXAMINER**